

Next Steps in Strategic Habitat Conservation:
The National Surrogate Species Approach and the Northeast Region's
Representative Species
Key Messages

In July, 2012, the U.S. Fish and Wildlife Service provided draft technical guidance to regions to assist them in their work with partners to identify a process to select surrogate species. This is the next step forward in Strategic Habitat Conservation (SHC), adopted by the Service in 2006. The Northeast Region began this process in 2009, calling it “representative species”. We have made progress, and will continue the work we have begun. To avoid confusion among Northeast Region employees, we will continue to refer to our effort as representative species.

Why representative species?

- Our vision is to maintain populations of Federal trust resources at levels desired by society. To do that, we must define, design, and deliver landscape-scale habitats capable of supporting these populations into the future.
- The Service does good work for species, but with the increasing scale and amount of threats to species and their habitats, we have to better target our work. With decreasing budgetary and staff resources, it is vital that we prioritize and determine whether what we are doing is having a positive effect for species and their habitats.
- Representative species is an approach for doing conservation planning with increasingly limited resources. This tool will help biologists and managers choose where, how much and what kinds of conservation actions are needed to support Federal trust species within a landscape.
- Representative species identify a smaller group of species that represent a larger suite of species. This will allow us to conserve many species by focusing on a few.
- We are “One Service,” breaking down programmatic barriers and working closely with partners to do conservation planning. Representative species will help all programs and partners come together around common biological targets.
- Establishing population objectives for representative species is a foundational element of conservation planning, that goes beyond one specific site and addresses the entire population across a landscape.
- Once we have identified population objectives for a suite of representative species, we can more effectively monitor and track conservation efforts through measurable outcomes and clearly link conservation actions with species populations.

What is a representative species?

- A *representative species* is one that, because of its habitat use, ecosystem function, or

management response, typifies lifecycle or habitat requirements for a larger group of species.

- Representative species simplify planning when the habitat needs of large numbers of species are to be considered, ensuring that conservation work will benefit many species, not just a few.
- Not all species will be readily encompassed by the representative species approach. Species that are particularly rare, that have unique habitat needs, or that experience unique management issues (e.g., primary threat is collection for pet trade or over harvest) will likely require individual conservation planning.

How are representative species being selected in the Northeast Region?

- Starting in 2009, the Northeast Region SHC team identified a need and began developing a process for selecting representative species.
- Building on that initial SHC team effort, the Northeast Region has been working with the University of Massachusetts Amherst, North Atlantic LCC, field staff and partners to identify representative species for the area encompassed by the North Atlantic LCC.
- A cross-program team of Service biologists guided the initial phases of representative species selection for the North Atlantic, with input through expert workshops that included about 90 Service staff and partners.
- The initial representative species list for the North Atlantic includes 87 terrestrial and 12 aquatic species.
- The aquatic set for the North Atlantic is considered preliminary because work is needed to consider a more comprehensive set of species and to better classify and characterize aquatic habitats that these species use.
- Region 5 will next begin identifying representative species for other geographic or ecological units in the Great Lakes, Appalachian, and South Atlantic regions.

What are the next steps in the representative species process?

- The Northeast Region Conservation Science Team will attend a national workshop in August at NCTC to review the surrogate species technical guidance, and recommend next steps to continue to engage employees in the ongoing selection process.
- For the North Atlantic LCC, pilot projects have been completed in three sub-regions (the Kennebec, middle-Connecticut, and Pocomoke and Nanticoke rivers) to evaluate tools produced by the Designing Sustainable Landscapes project, which models representative species and ecological integrity under present and future conditions across the landscape. Workshops in these pilot project areas will take place later this fall, and will engage Service employees.

- We will compile existing objectives and identify science needs to refine population objectives for representative species.

What other tools for landscape-scale conservation are being developed?

The Northeast Region is developing additional tools as part of our SHC framework, including:

- **SHC Decision and Communications Guide:** This tool will help field offices, programs, and partners communicate about where the highest priority investments are needed for representative and priority species, and how we can prioritize and coordinate those investments together on a local scale. Partners working together to plan and implement conservation for a species will use the tool to articulate how much conservation effort, where, and what type of habitat is needed to sustain a species population on the landscape.
 - We are currently testing the SHC Decision and Communications Guide for four species: New England cottontail, Atlantic salmon, forest birds, and mussels.
 - The tool is currently available (http://www.fws.gov/northeast/science/pdf/shc_operational_decision_framework0712.pdf), and will be further tweaked through these pilots. We will begin to integrate this tool more widely in our conservation planning efforts in FY2013.
- The **Designing Sustainable Landscapes** project will provide tools to inform management and restoration given current and future capacity of the landscape to support wildlife species and ecological integrity.
- Assessments of the regional **vulnerability** of species and their habitats **to climate change**.
- Mapping and assessment of habitat use by **marine birds** in the Northwest Atlantic, including relative risks from energy development.
- Identification of high priority areas for **reptile and amphibian conservation** in the Northeast.
- Evaluating how future stream temperatures and flows, coupled with landscape change, may affect populations of **Eastern brook trout**.